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DATE MAILED: 12/02/2009

NOTICE OF ALLOWANCE AND FEE(S) DUE

20995 7590 12/02/2009
KNOBBE MARTENS OLSON & BEAR LLP
2040 MAIN STREET
FOURTFENTH FLOOR

IRVINE, CA 92614

EXAMINER

GRANT, ALVIN J

ART UNIT PAPER NUMBER

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---------------------------------------------------------------------------------|-------------|----------------------|---------------------|------------------|--|
| 10/598,717 | 09/08/2006 | Tetsuo Shimomura | UNIU40.017APC | 9262 | |
| TITLE OF INVENTION: POLISHING PAD AND SEMICONDUCTOR DEVICE MANUFACTURING METHOD | | | | | |

 APPLN. TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEES) DUE
 DATE DUE

 nonprovisional
 NO
 \$1510
 \$300
 \$0
 \$1810
 03/02/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE: shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

| INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notifical | form should be used to correspondence including a below or directed off tions | for transmitting the ISS ng the Patent, advance herwise in Block 1, by | SUE FEE and PUBLICATI orders and notification of n (a) specifying a new corres | ON FEE (if requir naintenance fees wi pondence address; | ed). B ill be r and/or | locks 1 through 5 st nailed to the current (b) indicating a sepa | nould be completed where correspondence address as trate "FEE ADDRESS" for |
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| CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) | | | | Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. | | | |
| 2040 MAIN STE FOURTEENTH | RTENS OLSON REET FLOOR | & BEAR LLP | Lhe | Certify that this | ificate | of Mailing or Trans | mission g deposited with the United it class mail in an envelope above, or being facsimile ate indicated below. |
| IRVINE, CA 92 | 614 | | | | | | (Depositor's name) |
| | | | | | | | (Signature) |
| | | | | | | | (Date) |
| APPLICATION NO. | FILING DATE | | FIRST NAMED INVENTOR | | ATTOE | RNEY DOCKET NO. | CONFIRMATION NO. |
| 10/598,717 | 09/08/2006 | | Tetsuo Shimomura | | U | NIU40.017APC | 9262 |
| | | | DEVICE MANUFACTUR | | | | _ |
| APPLN, TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE | FEE | TOTAL FEE(S) DUE | DATE DUE |
| nonprovisional | NO | \$1510 | \$300 | \$0 | | \$1810 | 03/02/2010 |
| EXAM | INER | ART UNIT | CLASS-SUBCLASS | | | | |
| GRANT, | | 3723 | 451-041000 | | | | |
| L Change of correspondence address or indication of "Fee Address" (37 CFR 1.83) Change of correspondence address (or Change of Correspondence Address form PIVSB/E/2) authority (1998) The Address Findication (or "Fee Address" Indication form PIVSB/E/2) authority (1998) The Address Findication (or "Fee Address" Indication form PIVSB/E/2) authority (1998) To Manuel (19 | | | 2. For printing on the patent front page, list (1) the annes of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agent. If no name is listed, no name with be prained. THE PATENT (print or type) data will appear on the patent. If an assignce is identified below, the document has been filled for 17 a substitute for filing an assignment. | | | | |
| (A) NAME OF ASSIG | GNEE | | (B) RESIDENCE: (CITY | and STATE OR CO | DUNT | RY) | oup entity 🚨 Government |
| 4a. The following fee(s): Issue Fee Publication Fee (N | o small entity discount j | | 4b. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo | d. Form PTO-2038 authorized to charg | is attac | ched. equired fee(s), any de | |
| | s SMALL ENTITY state | us. See 37 CFR 1.27. | b. Applicant is no long | | | | |
| NOTE: The Issue Fee an interest as shown by the | d Publication Fee (if req records of the United Sta | uired) will not be accept ites Patent and Trademan | ed from anyone other than the Office. | he applicant; a regis | tered a | ttorney or agent; or th | e assignee or other party in |
| Authorized Signature | | | | Date | | | |
| Typed or printed name | | | | Registration No | | | |
| This collection of inform an application. Confident submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223 | ation is required by 37 C tiality is governed by 35 d application form to the ons for reducing this bu (irginia 22313-1450. DC (13-1450. | CFR 1.311. The informat i U.S.C. 122 and 37 CFF c USPTO. Time will var rden, should be sent to t D NOT SEND FEES OR | ion is required to obtain or r R 1.14. This collection is est by depending upon the indivite Chief Information Office COMPLETED FORMS TO | etain a benefit by th imated to take 12 m idual case. Any con r, U.S. Patent and T D THIS ADDRESS. | e publi inutes nments fradem SENE | to which is to file (and to complete, including s on the amount of tit ark Office, U.S. Depa of TO: Commissioner | by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450, |

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offic Address: COMMISSIONER FOR PATENTS

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| 20995 75 | 90 12/02/2009 | | EXAMINER | | |
| KNOBBE MARTENS OLSON & BEAR LLP | | AR LLP | GRANT, ALVIN J | | |
| 2040 MAIN STRE | | | ART UNIT | PAPER NUMBER | |
| FOURTEENTH FI | | | 3723 | | |
| IRVINE, CA 92614 | | | DATE MAIL ED. 12/02/2000 | | |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

Notice of Allowability

| Application No. | Applicant(s) | 1 |
|-----------------|------------------|---|
| 10/598,717 | SHIMOMURA ET AL. | |
| Examiner | Art Unit | 1 |
| ALVIN L GRANT | 3723 | l |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to communications filed 7/3/09.
- The allowed claim(s) is/are 25-36.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 - 1. A Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment reparting REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2.
 Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. 🔲 Other ___

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EXAMINER'S AMENDMENT

 An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

- The following changes to the drawings have been approved by the examiner and agreed upon by applicant: Fig. 1 has been labeled "Prior Art". In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.
- 3. The following is an examiner's statement of reasons for allowance: The art of record considered as a whole alone or in combination neither anticipates nor renders obvious a method of manufacturing a polishing pad comprising the step of: for claim 25: dipping a material in a H2O2 aqueous solution at pH 4 for 24 hours and the light-transmitting region is a single layer structure comprising a polyurethane resin comprising 4,4'-diphenylmethane diisocyanate as an organic isocyanate and at least one high-molecular-weight polyol selected from the group consisting of polycaprolactone polyol, polyester polycarbonate polyol, and polyester polyol formed from adipic acid, hexane diol, and ethylene glycol; and for claim 31: dipping a material in a KOH aqueous solution at pH 11 for 24 hours and the light-transmitting region is a single layer structure comprising a polyurethane resin comprising 4,4'-diphenylmethane diisocyanate as an organic isocyanate and at least one high-molecular-weight polyol

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selected from the group consisting of polycaprolactone polyol, polyester polycarbonate polyol, and polyester polyol formed from adipic acid, hexane diol, and ethylene glycol, together in combination the rest of the limitations of the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALVIN J. GRANT whose telephone number is (571)272-4484. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/A. J. G./

Examiner, Art Unit 3723

/Joseph J. Hail, III/

Supervisory Patent Examiner, Art Unit 3723